17/4 ss
3/8

Work Order ID 107194

107194

September-23-13 11:20:07 AM

Item ID: D4749-1 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Spacer

Start Date: 9/23/13 **Start Qty:** 20.00 *20*
Required Date: 9/23/13 **Req'd Qty:** 20.00 *20*
Reference:

Cust Item ID:
Customer:

Run Start *NR1*
Stop *NR2*

Approvals: **Process Plan:** M **Date:** 13-09-23 **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr: D4749 / Revision Nbr: A									
100		0.00							
100	Hardinge CNC LATHE SMALL								
Hardinge	**Memo**	0.00	FK 13/09/25			20	Ø		
Hardinge CNC Lathe Small	1-TURN AS PER FOLIO FB & DWG FOLIO REV:_____								
	DWG REV: A		DAS 40 9-89 13/09/26						
	2-DEBURR AS REQUIRED								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110									
QC	**Memo**	0.00	FK- 13/09/25			20	Ø		
Quality Control									

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

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Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC8- Inspect parts - second check	0.00							
120									JL 13-9-30
QC	**Memo**	0.00							
Quality Control									
130	Identify as per dwg & Stock Location 123	0.00				18 ~~20~~			
130									
Packaging	**Memo**	0.00							
Packaging									13-9-30
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	**Memo**	0.00							
Quality Control									

HJ / RM 13/09/30

MF 13-9-30

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

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- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

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Doc/Data	☐									
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Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
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- ☐ Temperature/Cure
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- ☐ Other _____

Picklist Print

September-23-13 11:20:07 AM

Work Order ID: 107194
Parent Item: D4749-1
Parent Item Name: Spacer

Start Date: 9/23/13 **Required Date:** 9/23/13
Start Qty: 20.00 **Required Qty:** 20.00

Comments: IPP REV:A NEW ISSUE 12.11.27 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M174R0.375 17-4 SS ROUND BAR .375"		Purchased	No				f	36.8770		**0.62**	DAS 40 9-89	13/09/26	

Location	Loc Qty	Loc Code	
MAT030	36.877		
121546	1		
*125520	35.877		.62

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

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Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Supplier	☐									
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- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other _____

DART AEROSPACE LTD	Work Order:	107194
Description:	Part Number:	
Inspection Dwg: Rev:		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø.194	+.002 / -.005	.1935	✓		FK-04	Vern.
Ø .245	+.000 / -.005	.2445	✓		"	"
.160	+/- .010	.161	✓		"	"
.025 x 45°	+/- .010	.025	✓		"	"

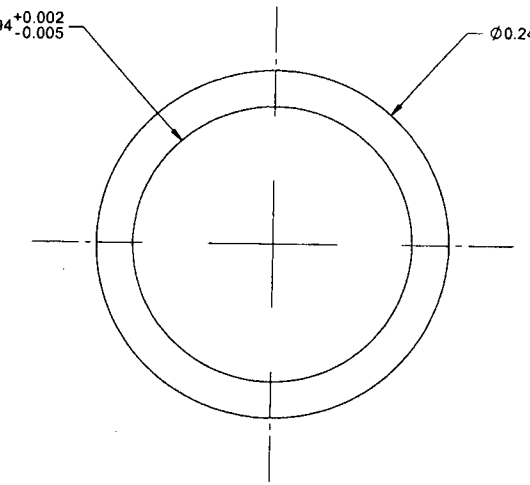
Measured by:	FK
Date:	13/09/25

Audited by:	JL
Date:	13-9-30

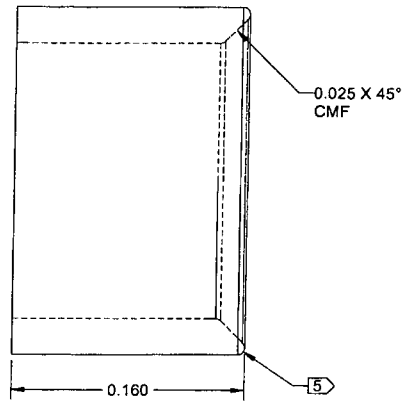
Preliminary Approval:	
Date:	

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15



D4749-1 SPACER



107194
RB 09-23

RELEASED
2012 -12- 06

NOTES:
1) MATERIAL: 17-4 PH / S17400/ TYPE 630 SS ROUND BAR PER AMS 5643 / ASTM A564
REF DART SPEC. M17-4-R.
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: LESS THAN 0.01 lb

REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE	AP	12.11.22

DESIGN	AP	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	AP		
CHECKED		DRAWING NO. D4749	REV. A
MFG. APPR.			SHEET 1 OF 1
APPROVED		TITLE SPACER	SCALE NTS
DE APPR.			
DATE	12.11.22		

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